

# EXHIBIT 1

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

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<b>BOUNTS TECHNOLOGIES LTD.,</b>	:	
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<b>Plaintiff,</b>	:	<b>CIVIL ACTION</b>
	:	
<b>v.</b>	:	<b>NO. 2:23-cv-00890-MRP</b>
	:	
<b>CONNECTIFY, INC., and DOES</b>	:	
<b>1-100</b>	:	
	:	
<b>Defendants.</b>	:	
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**DECLARATION OF LEVI RUSSELL**  
**REGARDING THE SCOPE AND CONTENT OF THE PRIOR ART**

The declarant, Levi Russell, states follows:

1. I make this declaration based upon my own personal knowledge and experience.
2. I am the inventor of the subject matter of United States Patent No. 9,258,309 and assigned to Bounts Technologies, Ltd. (“’309 Patent”). I am also familiar with the technology disclosed in Fig. 1 of the ‘309 labeled as “Conventional (Prior Art).”
3. I have been active in the computer and telecommunications arts since as early as 2001.

4. In the time frame of November 2008 when the patent application was originally filed, computers included the use of a network adapters comprising network interface cards. In 2008, a typical computer comprised a single network adapter comprising a single network interface card. '309 Patent, column 1, line 65 to column 2, line 3 (1:65-2:3).
5. In 2008, the computer hardware and software disclosed in the '309 Patent was any typical laptop, general purpose computer. '309 Patent, 3:57-61, 4:19-24, 8:35-39 and FIG. 4 "PC". Such typical computers comprised a single network adapter comprising a single network interface card comprising utilizing a list in table format of one or more routing destinations or routing tables. The list is referred to as a routing table. '309 Patent, 2:13-15, 2:58-67, 3:16-21, 3:57-61, 5:57-59, 7:9-11, 8:26-30. No typical 2008 computer or any computer disclosed in the '309 Patent comprised more than one network adapter, network interface card or routing table list.
6. In the context of the computers disclosed in the '309 Patent, the claimed inventions comprise routing tables which are routing table entries in the same routing table. For example, the claim language of the '309 Patent does not claim a "first routing table" and/or a "second routing table" because there was only one "routing table in the [single] network interface card." '309 Patent, claim 1 and 19. That is, the claimed inventions use one routing table list for all sub-network IP addresses or sub-routing table entries (also known as routing tables) for governing travel of data packets between multiple devices in the computing system.
7. Based upon the nature and context of computing devices in 2008, the claimed inventions of the '309 Patent do not require two, distinct routing lists tables to govern data packet travel in multi-network or multi-device computing systems.

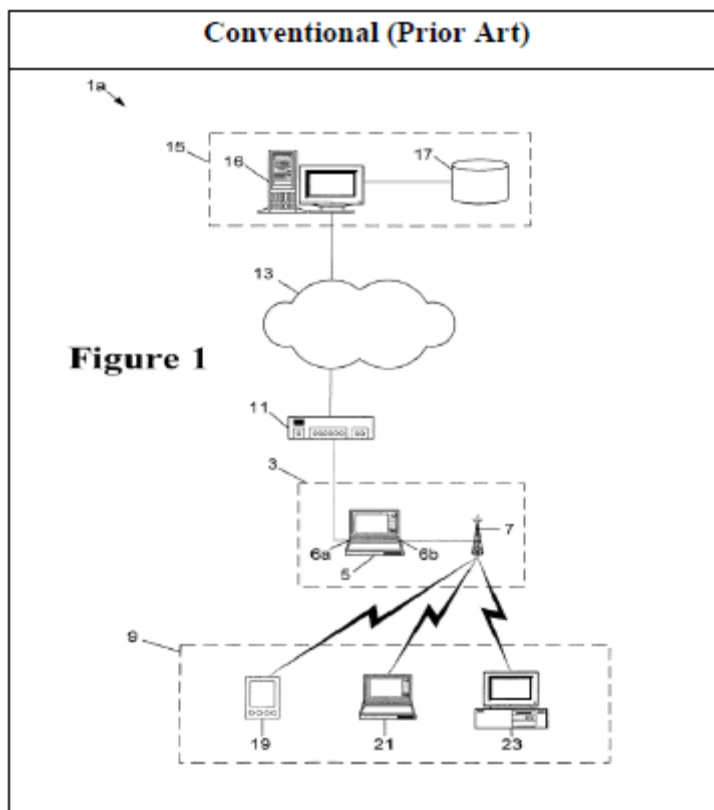
8. This is expressly taught by the '309 patent (col. 1 line 60 to col. 2, line 9):

In the system of FIG. 1, two ports 6a, 6b are used on the wireless access point controller 5 of the wireless access point 3, each point 6a, 6b having its own Internet Protocol (IP) address. A disadvantage of this arrangement is that each port 6a, 6b requires a network adaptor, such as a network card. As 65 commonly available personal computers and laptops are not conventionally provided with two network adaptors the requirements for two network adaptors is an impediment to commissioning of conventional wireless access points 3 as shown in FIG. 1.

However, in such prior art hotspot arrangements, it is necessary to have a separate router (for internet access) such as a modem 11 and a wireless access point 3. T[he '309] invention provides improvements to the system and method described above, allowing the use of a standard wireless router to provide a hotspot for guest access.

9. At the time of the '309 invention, a single network card could potentially support two IP addresses and subnets. However, there was no functionality or need to route traffic between these two subnets or to verify or authenticate the traffic. The two IP addresses and subnets were primarily used for vertical traffic to and from the IP addresses. They were not intended for horizontal IP traffic transit, nor for verified and authenticated traffic, such as would be seen in the hotspot system operated by the patentee at the time of the invention.
10. Unlike the '309 invention, the technology of Fig. 1 pertains to 2004 technology that converts an ordinary PC into a hotspot by connecting two Ethernet cables. One cable connects to the PC's onboard network card (a standard feature on modern PCs and laptops), while the other connects to a second, specially added network card that enables

the PC or laptop to function as a Wi-Fi hotspot controller. This technique utilizes two network adapter cards. This technique is illustrated in Fig. 1 as follows:



11. Item 11 represents the modem or router commonly found in homes or businesses connected to the internet. Item 11 is typically connected via an Ethernet cable to Item 5 at port 6a, the PC or laptop. Item 5, in turn, has a separate Ethernet cable running from port 6b a second network card to Item 7, the Wireless Access Point. This second network card port 6b could either be installed in the back of a modular desktop PC or connected via a USB adapter if it's a laptop, as laptops typically don't come with two built-in Ethernet network cards, neither do they come with network card slots like modular desktop PC's often do.

12. Another embodiment described in the 2004 technology would involve Item 11 being

connected to the PC or laptop via Ethernet, with the PC or laptop's on board Wi-Fi card or module serving as the second network card. In this case, no additional Ethernet connection to Item 7 (the Wireless Access Point) would be required.

13. The 2004 prior art involves a PC functioning as a hotspot controller with two separate network cards or modules. PCs and laptops typically do not come with two network cards or modules of the same type. Therefore, for practical reasons, anyone wishing to use the prior art would need to separately install a second network card.
14. The improvement described in the '309 patent eliminates this extra burden, simplifying the process for anyone setting up a hotspot controller using the onboard network card or module that comes with the PC or laptop. Unlike the 2004 invention, the '309 invention addresses the IP transit and control between two subnet networks on a single network card or adapter, whether wired or wireless.
15. At page 6 of Defendant's motion, Defendant argues that the *"portion of the claim [1] that appears above in bold is the 'invention' for which patent protect was sought. The portion of the claim above that is underscored is prior art acknowledged in the '309 patent."* argument at page 6 of the motion paper. This statement is not correct. As established in this declaration, the scope and content of the 2004 prior art was not a "method of operating a single network adapter" "to communicate wirelessly with a first sub-network and a second sub-network." Unlike the prior art, that is part of the invention of the '309.
16. The prior art does not teach using a single network adapter to set up a first network address and routing table in the network interface card for use in the first network and setting up a second network address and routing table in the network interface card for

use in the second sub-network, and using a single network interface card to receive data for one of the first and second sub-networks, and to re-transmit the data to the other of the first and second sub-networks, using the network addresses and routing tables.

This is part of the invention of the '309 patent.

17. Prior to 2023, I inspected Connectify's Wifi Direct product called the Hotspot Product. I reviewed Defendant's own publications related to its Hotspot Product. I also downloaded, used and analyzed the Hotspot Product. I was able to identify software code, processes, routing tables, networks, steps and functionality of Defendant's Hotspot Product that would be understood by one skilled in the art. For example, I was able to run, observe and analyze the operation, steps, code, code-induced functionality and results achieved by the methods employed by Defendant's Hotspot Products and as explained by Defendant's own published descriptions of the Hotspot Products. My inspection of the Hotspot Product revealed that Defendant's Hotspot Product embodies all the claim elements of claim 1 of the '309 Patent.

18. The '309 Patent is directed to "a method of operating a wireless access point for providing access to a network. This allows, for example, operation of a wireless access point for providing access to the Internet (commonly know[n] as a "hotspot")."<sup>1</sup> I identified that, like the '309 Patent, Defendant's Hotspot Products provides a wireless access point to the Internet: Indeed, Defendant admits: "Connectify Hotspot: Turn your PC into a Wi-Fi Hotspot and share Internet with all your devices."<sup>2</sup> Defendant expressly

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<sup>1</sup> '309 Patent, 1:7-10 (citation format to '309 Patent throughout is to column:line(s)).

<sup>2</sup> [www.connectify.me](http://www.connectify.me).

explains in its own publication<sup>3</sup>:



19. I also determined that like claim 1 directed to “a method of operating a single network adapter, comprising a single network interface card or module, to communicate wirelessly with a first sub-network and a second sub-network,” Defendant’s Hotspot Products provides the same. Defendant expressly states<sup>4</sup> that using Defendant’s Hotspot Products requires using just one network interface card namely “just your computer’s internal WiFi card and Connectify Hotspot software:”

#### Best Virtual Router Software for Windows 7, 8, 10 and 11

If you need to share an Internet connection with other devices, extend a WiFi network or maybe just create a network between your devices, what will you use? Most probably the first thing that comes into your mind is a WiFi router. But there’s no reason to spend time configuring it and carrying it around in order to stay connected on-the-road or at job sites. With just your computer’s internal WiFi card and Connectify Hotspot software, you’ve got a fully-featured virtual router.

20. Based upon my observation, in the Hotspot Product the following are present. The first sub-network in a hotspot configuration is the network established between the computing device and the router also called the Wireless Local Area Network (WLAN). The first sub-network communicates with the network card in the computing device. The second sub-network is generated by Defendant’s Hotspot Product software including its cross

<sup>3</sup> [www.connectify.me](http://www.connectify.me).

<sup>4</sup> <https://connectify.me/virtual-router-for-windows/>.



connect functionality. The cross connect functionality establishes a second, virtual sub-network which also communicates with the network card. The second sub-network includes an IP address of a routing table entry established by Defendant's Hotspot Products.

21. I also determined that like claim 1 directed to "setting up a first network address and routing table in the network interface card or module for use in the first sub-network" that the Defendant's Hotspot Product also does so. My observation of the operation of Defendant's Hotspot Product reveals that its first network address is an IP address received by the Defendant's hotspot software from the WLAN router and is used by Defendant's Hotspot Product software to set up or configure a routing table entry with the network or IP address for use in the first sub-network.

22. My inspection also determined that like claim 1 directed to "setting up a second network address and routing table in the network interface card or module for use in the second sub-network" that Defendant's Hotspot Products uses this technique. My observation identified Defendant's Hotspot Product with its cross connection providing functionality of a DHCP server, setting up a second network address (virtual network) in a routing table entry. An example of setting up a second network address and routing table is found in the WiFi Alliance's Wi-Fi Peer-to-Peer (P2P) Technical Specification v1.7, section 3.2.6.1. That second network or IP address is used in the second sub-network of the Defendant's Hotspot Products.

23. In addition, my inspection determined that like claim 1 directed to "using said single network interface card or module to receive data for one of the first and second sub-networks, and to re-transmit the data to the other of the first and second sub-network,

using the network addresses and routing tables” that Defendant’s Hotspot Products also does so. I observed the use of routing tables and data transmission established, caused and used when Defendant’s Hotspot Product software is running and which show that on the single network card, data is transmitted between the first and second sub-networks (WLAN and Guest) using the network addresses and routing tables/entries that are generated by Defendant’s Hotspot Products including governance of data traffic between network destinations.

24. My inspection also determined that like claim 1 directed to “wherein the first sub-network includes a network gateway and the network adapter is configured to control access from the second sub-network to the network gateway” that Defendant’s Hotspot Products also include these features and functions. I observed that the cross connect functionality of Defendant’s Hotspot Products uses the first sub-network to act as a gateway for transmitting data to and from the internet. I identified that the cross connect functionality of Defendant’s Hotspot Products uses the network card or adapter configured to carry data from the second sub-network and to the network gateway and to control access between the second sub-network and the network gateway.

25. Further, my inspection also determined that like claim 1 directed to “wherein the step of receiving data comprises receiving a request from a user via the second sub-network to access the gateway on the first sub-network, verifying the user's access rights, and allowing the user to access the gateway if and only if the user is entitled to access the gateway.” that Defendant’s Hotspot Products also do so by receiving a data request from a user at the second sub-network seeking access to the gateway of the first sub-network. The Defendant’s Hotspot Products with cross connect requires use of a password to

verify the user's right to access the internet gateway. Within the cross connection functionality standard, the Defendant's Hotspot Product software verifies the user's access rights associated with the user's password and the user is allowed to access the gateway and beyond only if the user is entitled to access the gateway. An example of this is taught in the WiFi Alliance's WiFi Peer-to-Peer (P2P) Technical Specification, section 3.2.1 P2P Group ID.

26. The Defendant's product does not use the 2004 technology; the Defendant's product uses the invention of the '309 invention, as claimed.
27. During the prosecution of the application for the '309 patent, the patent examiner made no section 101 eligibility refusal or rejection.
28. I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

March 13, 2025

/s/ Levi Russell\*

Levi Russell

\*electronic signature by permission